

Supporting Information for

Electrodeposition on nanofibrous polymer scaffolds: Rapid mineralization, tunable calcium phosphate composition and topography

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1. The SEM micrographs of nanofibers electrospun from various PLLA concentrations.

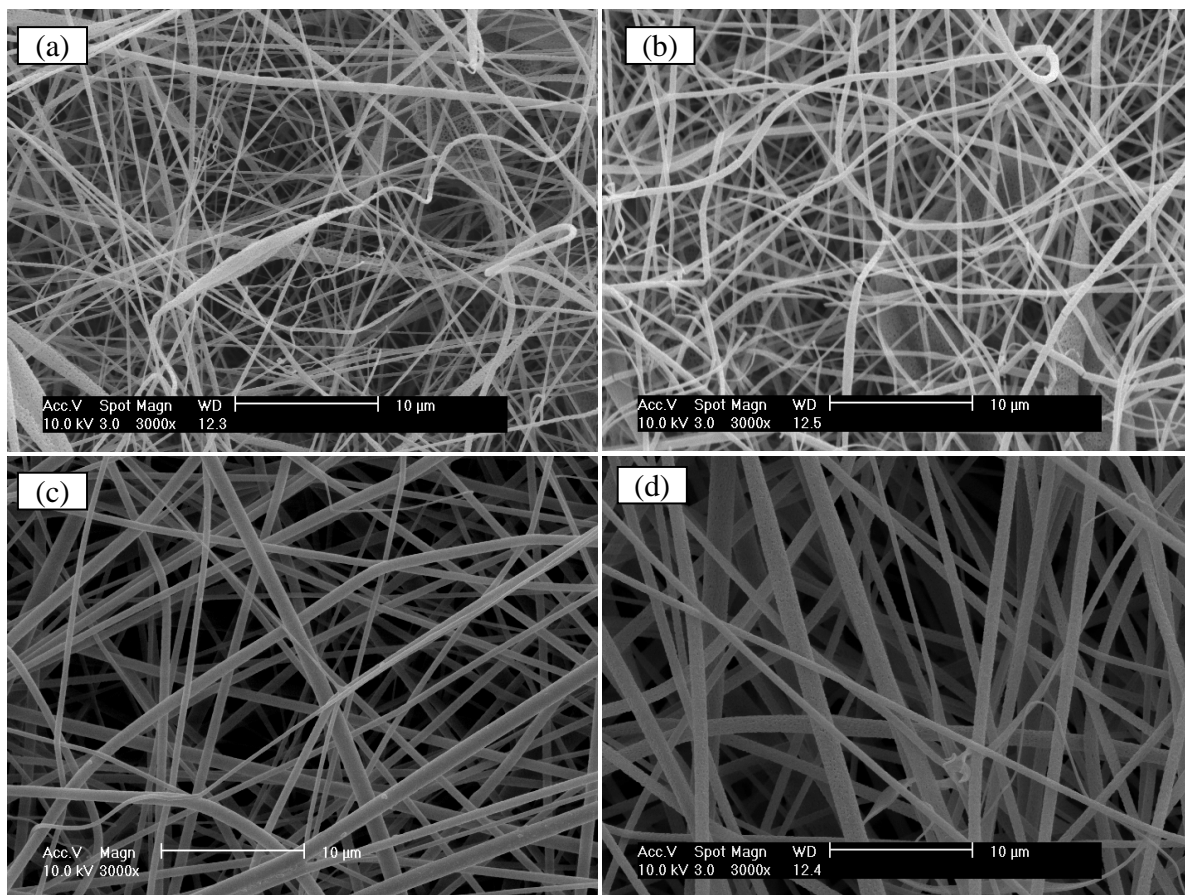


Figure S1. The SEM micrographs of nanofibers electrospun from various PLLA concentrations: (a) 6 wt%, (b) 8 wt%, (c) 10 wt%, and (d) 12 wt%.

2. The EDX spectra indicating the Ca/P atomic ratios of deposits formed at different temperatures.

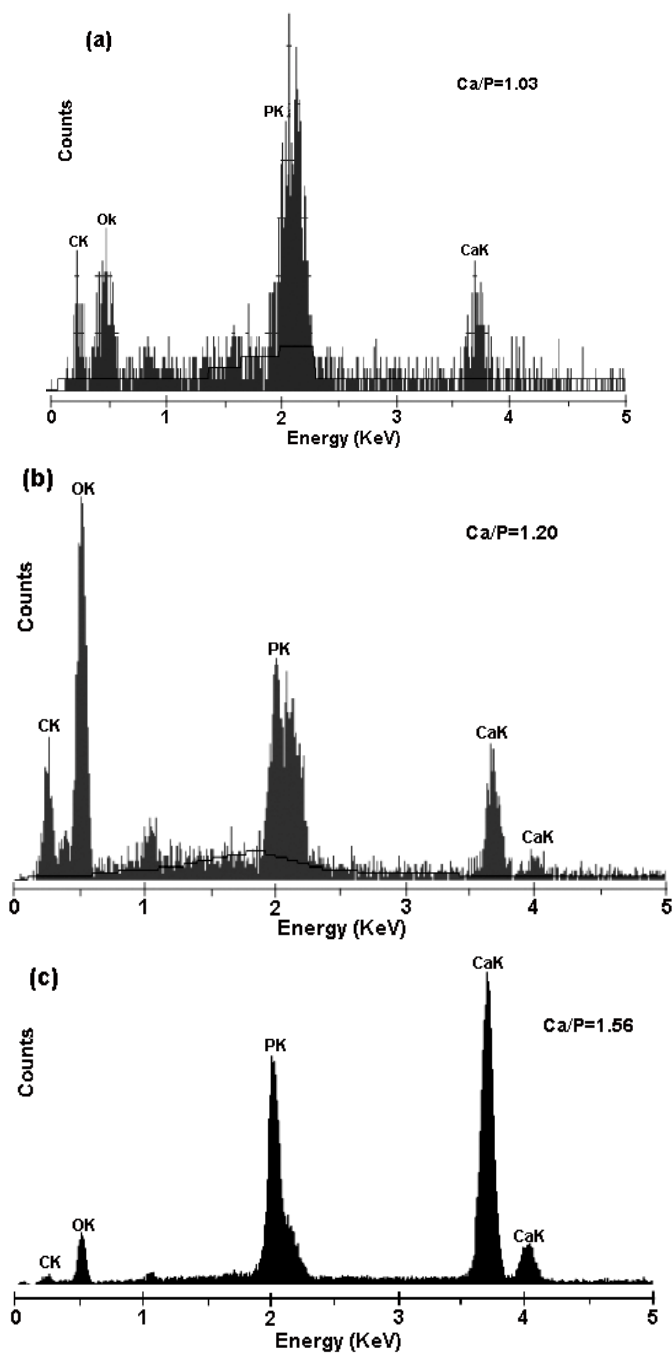


Figure S2. The EDX spectra of deposits formed at different temperatures at 3V for 60 min. (a) nest-like phase with Ca/P = 1.03 (25°C), (b) flake-like phase with Ca/P = 1.20 (60°C), (c) needle-like phase with Ca/P = 1.56 (80°C) phases.

3. The SEM/EDS elemental mapping for Ca, P, C, and O in needle-like HA phase deposited at 80°C and 3V for 60 min.

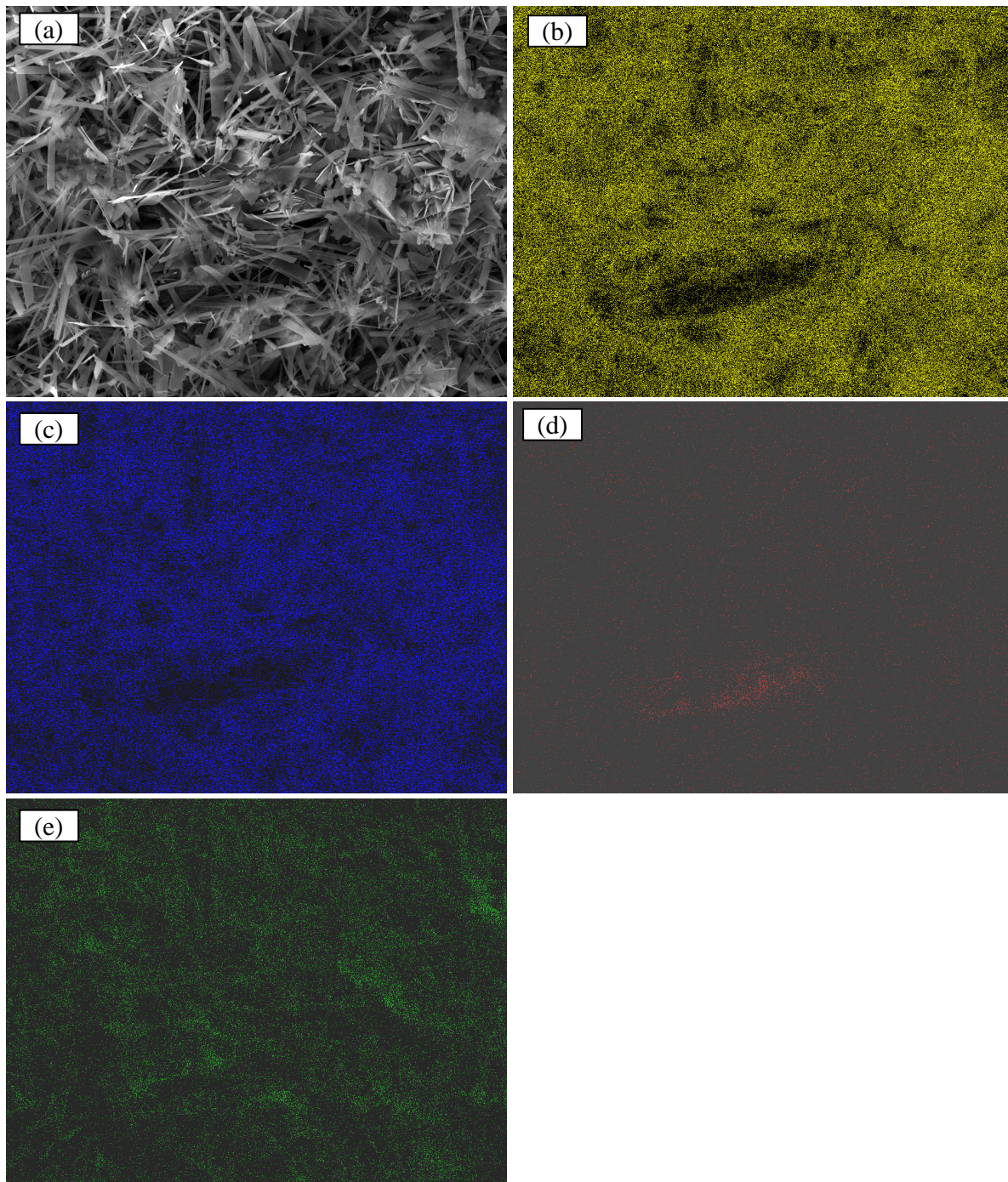


Figure S3. SEM-EDS elemental mapping for Ca, P, C, and O in needle-like HA phase deposited at 80°C and 3V for 60 min. (a) SEM micrographs of needle-like HA, (b) Ca K α mapping, (c) P K α mapping, (d) C K α mapping, (e) O K α mapping.
4. The ATR-FTIR spectra.

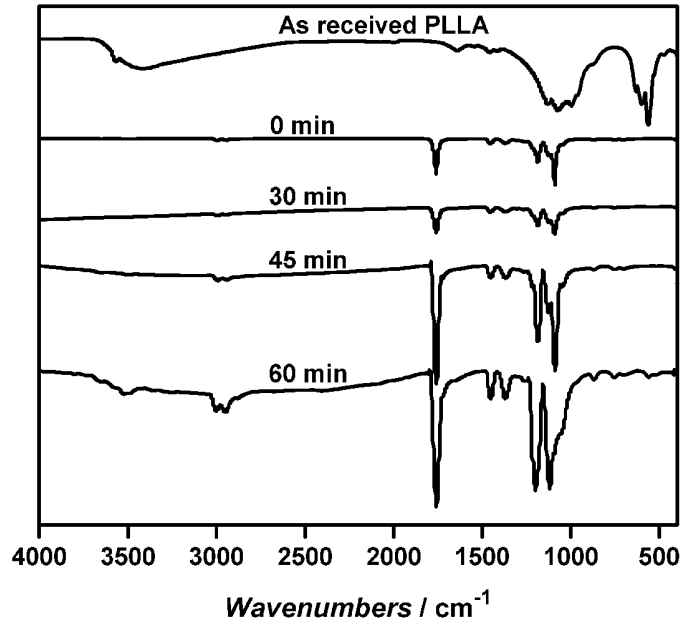


Figure S4. The ATR-FTIR spectra of PLLA pellets (as-received) and 10 wt% PLLA nanofibrous scaffolds electrodeposited at 60°C and 3V for 0, 30, 45, 60 min. The mineralized samples were treated by ultrasonic separation method to remove the apatite coatings before FTIR analysis.